

### **REMARKS**

The Examiner's Office Action mailed June 3, 2004 has been received and carefully reviewed. Claims 1, 5, 6, 13, 15, 17, 20 and 25 have been amended and claims 3, 4, 8-10, 12 18, 24 and 27 has been cancelled. Further, new claims 37-42 are added. Therefore, claims 1-7, 11, 14-17, 19-23, 25, 26, 28-42 are pending in this application. For at least the following reasons, it is respectfully submitted that this application is in condition for allowance.

Initially, it is noted that this Amendment does not increases the total number of claims pending in the application. However, It is further noted that this Amendment increases the total number of independent claims pending in the application to seven (7) from five (5), thus requiring an excess independent claim fee of \$172.00 for two claims in excess of five. Please charge the necessary fee of \$168.00, in addition to RCE fee, to our Deposit Account No. 50-0945.

In the Action, the drawings are objected to under 37, CFR 1.83 (a). As explained in the Paper submitted on March 10, 2004 at pages 14-16, Applicants

understand every feature of the invention specified in the claim is shown in the drawings. Nevertheless, in order to avoid unnecessary dispute, claims, 3, 4, and 18 has been cancelled, and claim 17 has been amended. Thus, Applicants believe that the objection is no longer applicable, and respectfully request to withdraw the objection.

In the Action, claims 13, 14, 19-23, 25, 26, 28, 31, 32, 35 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Takiar, or in the alternative, under 35 U.S.C. 103(a) as being obvious over Takiar in combination with Fujiyama.

**Applicant disagrees because of the following reasons.**

Rejected independent claims 13, 20, 25 have been amended. The characteristics of these claims are;

- (1) **a second bonding wire**, wherein one end thereof is formed on the internal terminal and the other end is formed **at the top of the first metal bump**, and **a third bonding wire**, wherein one end thereof is formed on the conductive relay pad in the second area and the other

end is formed **at the top of the second metal bump** (claim 13),

(2) **a wire**, wherein one end thereof is formed on the second internal terminal and the other end is formed **at the top of the bump** (claim 20),

(3) **a first wire**, wherein one end thereof is formed on the first conductive pattern and the other end is formed **at the top of the first bump**; and a **second wire**, wherein one end thereof is formed **at the top of the first bump** and the other end is formed **at the top of the second bump** (claim 25).

However, none of the cited reference discloses the characteristics described above. Specifically, as shown in Fig. 4 of Fujiyama, it discloses that one end of the wire 5a, 5b is formed on the conductive pad, not on a metal bump. In addition, the differences between the invention and other cited references have been discussed in Paper submitted on March 10, 2004 at pages 17-19.

Therefore, since neither Takiar nor Fujishima alone or in combination does not disclose or suggest the claimed multi-chip package type semiconductor device,

independent claims 13, 20 and 25 clearly are not anticipated or obvious by, and is deemed to be clearly patentable over Takiar or Takiar and Fujishima, and the rejection of claims 13, 20 and 25 accordingly should be withdrawn.

Claims 14, 19, 21-23, 26, 28, 31, 32, 35 and 36 depend from one of independent claims 13, 20 and 25 directly and indirectly. Therefore, these claims also are not anticipated or obvious by, and are deemed to be clearly patentable over Takiar or Takiar and Fujishima, and the rejection of these claims accordingly should be withdrawn.

In the Action, claims 24 and 27 are rejected under 35 U.S.C. 103(a) as being obvious over Takiar in combination with Fujiyama. **Applicants disagree.** As described above, since Applicants believe claims 20 and 25 from which claims 24 and 27 depend, respectively, include patentable subject matter, the claims 24 and 27 should be patentable, and the rejection of claims 24, 27 accordingly should be withdrawn.

In the Action, claims 1, 2, 15, 16, 29, 30, 33 and 34 are rejected under 35 U.S.C. 103(a) as being obvious over Takiar or Takiar in combination with any of Hiba and Fujiyama. **Applicant disagrees because of the following reasons.**

Rejected independent claims 1 and 15 have been amended. The characteristics of these claims are;

- (1) **a second bonding**, wherein one end thereof is formed on the second conductive pattern and the other end is formed **at the top of the first metal bump** on the conductive relay pad in the first area; and **a third bonding wire**, wherein one end thereof is formed on the conductive relay pad in the second area and the other end is formed **at the top of the second metal bump** (claim 1),
- (2) **a second bonding wire**, wherein one end thereof is formed on the second conductive pattern and the other end is formed **at the top of the first metal bump**, and **a third bonding wire**, wherein one end thereof is formed **at the top of the first metal bump** and the other end is formed **at the top of the second metal bump** (claim 15).

However, none of the cited reference discloses the characteristics described above. Specifically, as shown in Fig. 4 of Fujiyama, it discloses that one end of the wire 5a, 5b is formed on the conductive pad, not on a metal bump. In addition, the differences between the invention and other cited references have been discussed in Paper submitted on March 10, 2004 at pages 19-21.

Therefore, since neither Takiar, Hiba nor Fujishima alone or in combination does not disclose or suggest the claimed multi-chip package type semiconductor device, and since the examiner failed to show the motivation to combine Takiar with Fujishima, independent claims 1 and 15 clearly are not obvious by, and is deemed to be clearly patentable over Takiar or Takiar, Hiba and Fujishima, and the rejection of claims 1 and 15 accordingly should be withdrawn.

Claims 2, 16, 29, 30, 33 and 34 depend from one of independent claims 1 and 15 directly or indirectly. Therefore, these claims also are not obvious by, and are deemed to be clearly patentable over Takiar or Takiar, Hiba and Fujishima, and the rejection of these claims accordingly should be withdrawn.

In the Action, claims 3-12, 17 and 18 are rejected under 35 U.S.C. 103(a) as being obvious over Takiar and Fujishima or in combination with Takiar, Hiba and Fujiyama. **Applicants disagree.** First of all, claims 3, 4, 8-10, and 12, 18 have been cancelled. Further, as described above, since Applicants believe claims 1 and 15 from which claims 5-7, 11 and 18 depend, respectively, include patentable subject matter, the claims 5-7, 11 and 18 should be patentable, and the rejection of claims 5-7, 11 and 18 accordingly should be withdrawn. Further, rejected claim 17, which is now an independent claim, has a characteristic as follows;

- (1) **a second bonding wire**, wherein one end thereof is formed on the second conductive pattern and the other end is formed **at the top of the metal bump**; and **a third bonding wire**, wherein one end thereof is formed on the second terminal pad and the other end is formed **at the top of the metal bump**.

However, none of the cited reference discloses the characteristics described above. Specifically, as shown in Fig. 4 of Fujiyama, it discloses that one end of the wire 5a, 5b is formed on the conductive pad, not on a metal bump.

Therefore, as well as claims 5-7, 11 and 18, claim 17 also includes a patentable subject matter. Thus, the rejection of claims 17 also accordingly should be withdrawn.

It is noted that this Amendment has been prepared using the requested new format. If there are any irregularities in this format, it would be greatly appreciated if Applicant's Counsel would be so advised

In view of the foregoing, the application is deemed to be in condition for allowance and such is earnestly solicited. Should any fee be further needed, please charge it to our Account No. 50-0945 and notify us accordingly.

Respectfully submitted



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